

# -Y-12 BULLETIN

A Newspaper For Y-12 Employees of Union Carbide Corporation—Nuclear Division

VOL. 20 - NO. 11

OAK RIDGE, TENNESSEE

Wednesday, March 16, 1966



LENA RUTH JONES shows the ease of reading the air monitor card which is stationed at some 300 air-sampling stations throughout the plant. The IBM card contains the filter which is read by the scintillation counter to determine the radiation content of the air collected.

# Simple And Efficient Method Is **Developed In Air Monitoring**

highly efficient method of collecting and recording air monitor-Y-12. It promises wide application in various research and production situations.

Y-12 is involved in the machining and fabrication of various radioactive materials used in the nation's space and defense programs. As part of a plant-wide health physics program, some 300 air-sampling stations are located throughout various areas. Filters in these stations are replaced every 24 hours and read by a scintillation counter to determine the radiation content.

Card Contains Sample

The new sampling system com-

# **ASME Meeting Set** Tomorrow At Elks'

The Oak Ridge Sub-Section of the American Society of Me-chanical Engineers will meet tomorrow. The meeting is set for Thursday, March 17, at 7:30 p.m., at the Elks Lodge, Arkansas Avenue, Oak Ridge.

Justin N. Baird Jr., ORNL's General Engineering and Construction Division, will be the speaker. His subject will be "Critical Path Scheduling Development Projects."

a native of Kansas City Baird received his AB degree from tine medical tests. Park College, Parksville, Missouri, and his BS in chemical engineering from the University of Michigan. He has been employed as an analytical chemist with Proctor and Gamble, an analytical chemist and production supervisor with Monsanto Chemical Company, and as senior research chemist with Lever Brothers. He joined Oak Ridge National Laboratory in 1952.

program starts promptly at 8. ing.

A simple, inexpensive, and bines the filter medium with a computer card. Each card, with a built-in filter, is placed in a ing data has been developed in plastic holder at a sampling station. When removed, the card is taken directly to a key punch machine equipped with a scintillation counter for automated an-alysis and data recording on the original card.

> When the counting process is complete, an International Business Machines 1401 computer is used to tabulate, calculate, and print out the area location where samples are obtained. With this equipment, some 300 to 400 samples can be processed automatically in about five minutes.

#### Lower Costs Noted

The system has reduced Y-12's air analysis costs by 85 per cent, with projected savings of over \$15,000 expected for each succeeding year. The system also has minimized the possibility of errors, since the information card and filter are never separated throughout the sampling and counting process.

The principle of using samples directly attached to computer cards also might be applied to particulate counting, optical density, colorimetric, spectrographic, x-ray, infra-red, and chromatog-raphic analyses. Ather possibilities include adaptation to the National Air Sampling Network, utilization in large biological re-

# Argonne's Morrison Is **Physics Seminar Speaker**

G. C. Morrison, Argonne National Laboratory, conducts this week's Physics Division seminar. His subject is "Isobaric Analog States in Nuclear Reactions."

The seminar is set for Friday, The social hour, with refreshments, begins at 7:30 and the Auditorium of ORNL's 4500 build-March 16, at 3:15 p.m. in the East

# Lists Spring Classes

### Registration Is Set For Next Wednesday

The University of Tennessee has announced its Oak Ridge Resident Graduate Program for the Spring Quarter. Registration is set for Wednesday, March 23, from 6 until 8 p.m. at the Oak Ridge Institute of Nuclear Studies Training Building on Laboratory

Classes offered in the new quarter include:

CHEMICAL ENGINEERING 5320 — Chemical Engineering Thermodynamics (7:10 to 9:10 p.m. Monday and Thursday). MATHEMATICS 4170 — Linear

Algebra and Geometry (5:15 to 6:45 p.m. Monday and Wednes-

MATHEMATICS 4530 - Introduction to Analysis (5:15 to 6:45 p.m. Tuesday and Thursday).

MATHEMATICS 4550 vanced Calculus (5:15 to 6:45 p.m. Monday and Thursday).

MATHEMATICS 5660 merical Methods (5:30 to 7 p.m. Monday and Thursday).

METALLURGICAL ENGI-NEERING 5860 - Metallurgy of Deformation and Fracture (5:15 to 7:15 p.m. Tuesday and Thurs-

PHYSICS 3730 - Introduction to Atomic and Nuclear Physics (8 to 9:30 p.m., Monday and Thursday).

PHYSICS 4740 - Accelerator Physics (7:30 to 9 p.m. Monday and Thursday).

PHYSICS 5250 - Electromagnetic Properties of Solids (5:15 p.m. to 6:30 p.m. Monday and Wednesday).

PHYSICS 5430 - Electromagnetic Theory (7 to 8:15 p.m. Monday and Thursday).

PHYSICS 5630 - Mathematical Methods in Physics (7 to 8:30 p.m. Wednesday and Friday).

PHYSICS 6130 - Quantum Me-

chanics (5:15 to 6:45 p.m. Tuesday and Thursday).

ZOOLOGY 3030 — Concepts in General Zoology (7 to 8:50 p.m. Wednesday, 6 to 10 p.m. Friday—

ZOOLOGY 4310 - Animal Cytology (7 to 10 p.m. Tuesday and Thursday, Lab 8 to 10)

ZOOLOGY 6130 - Seminar in Cellular Biology (7 to 8 p.m.

Classes begin for the above subjects March 24, and end May 27. Courses offered are approved for reimbursement under the Carbide Educational Assistance Plan.

Further information may be obtained by contacting the Graduate School office, telephone extension

#### SAFETY SCOREBOARD

The Y-12 Plant Has Operated 10 Days Or 228,000 Man-Hours Through March 13 Without A Disabling

> Injury Phone 3-7755 (Unofficial Estimate) For Daily Report
> On Accident-Free Hours

# UT Graduate School New Business Opportunities Are Cited In Carbide's Annual Report

## Research And Development Efforts Pave Way For New Products And Improved Processes

About one-quarter of Union Carbide's total research budget in 1965 was spent on basic studies in science and technology to develop new business opportunities, according to the annual report mailed recently to the corporation's 131,000 stockholders. Exploratory efforts have covered the whole range of modern science — from chemical studies of plant and animal cell walls to development of new approaches

for desalting water and conducting electricity.

In reporting that Union Carbide had spent \$78 million for research and development in 1965, President Birny Mason Jr. noted the importance of the corporation's continuing efforts to develop new and improved manufacturing processes as well as new products. He cited as an example extensive fundamental studies of the process for making ethylene oxide, the starting material for hundreds of different chemicals and plastics. He said that this effort had culminated in a capacity increase for this basic chemical of more than 300 million pounds per year by the end of 1965, with an accompanying increase in process efficiency. These benefits were attained, Mason pointed out, without the construction of any major new facilities.

Intermingling Of Technologies Cited For Opening New Fields Of Business

A novel electrical cable, consisting of sodium metal and polyethylene plastic, was mentioned as an example of the cross-fertilization of technologies within Union Carbide that are helping to open up new fields of business. This light-weight, low-cost electrical conductor makes use of both plastic and liquid metal technology.

Another example of the results of Union Carbide's technical skills was the corporation's development of a unique plastic material called parylene, with special characteristics useful in electronics. This plastic forms an impervious film so extremely thin — about five-millionths of an inch — that electronic capacitors are now being made by Union Carbide that are one-fifth the size of previous types.

> World's Strongest Material Resulted From Recent Research And Development

A superperformance fiber made of graphite was another one of the many products mentioned as having resulted from recent research and development expenditures. The new graphite yarn is the strongest and stiffest material for its weight ever produced. It will be used as a reinforcing material for components for aircraft, aerospace vehicles, and deep-submergence vessels.

While much of Union Carbide's research continues to be built around opportunities for expansion in basic products for industry, one product announced in 1965 helped solve a vexing problem for housewives — that of "clingy" plastic wrapping materials. This product, Textured Glad Wrap, was made possible by a patented process that places a hexagonal pattern on polyethlene film to keep the wrap from tangling

Union Carbide Constantly Extending Its Fields Of Activity

Taking advantage of its extensive experience in gas technology, Union Carbide is doing advanced work in ocean engineering. Its engineers have designed diving systems that enable divers to work on the ocean floor at greater depths than ever before.

Union Carbide biologists have also entered a new field of activity. They are engaged in studies to determine whether food plants will germinate and grow under water. Such studies could eventually lead to development of hybrid plants harvested on the ocean floor

A new pharmaceutical group within the corporation is studying, among other things, the effect of various drugs on the behavior of mice — to determine, for example, how effective certain drugs are in alleviating anxiety conditions. As part of a study of growing old, Union Carbide scientists at the government-owned Oak Ridge National Laboratory are isolating aging granules from human heart tissue.

Further evidence of the diversification of Union Carbide's activities is found in an enumeration in the annual report of some of the new chemical products that reached commercial status during the year. Among them are new chemicals for making urethane foams, including semiflexible types for automobile dashboards and other safety padding; several biodegradable chemicals for producing more effective house-

Continued on Page 3

# The Bulletin

Published Weekly For The Y-12 Employees Of UNION CARBIDE CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG ..



OFFICE Post Office Box Y Oak Ridge, Tenn. 37830 Bldg. 9704-2 Room 137 Telephone 3-7100

# Maples Son Ends Basic Training



Pvt. George L. Maples

Visiting his parents recently in Oak Ridge was Private George L. Maples. He is the son of Mr. and Mrs. A. M. Maples, 160 Latimer Road, Oak Ridge. Mr. Maples is in Y-12's A-2 Shops, 9212.

Pvt. Maples has just completed his basic training at Ft. Benning, Georgia . . . and is now at Aberdeen, Maryland, where he will have 10 weeks of special training. He attended Clinton High School before the family moved to Oak Ridge. His sister attends Oak Ridge High School now . . . and another brother is in Y-12.

George was a big outdoorsman here specializing in fishing and hunting.

## One In Every Six Patient Is A Child!

Of every six people admitted to a hospital annually, one is a child 15 years of age or younger, according to a recently reported health survey. Excluding well, newborn infants, the reported survey showed approximately 17 per cent of some 19 million cases studied were children. The average hospital stay for boys was slightly longer than for girls.

Tonsillitis, simple bronchial trouble, heavy colds and other non-serious upper respiratory conditions were the reported cause for most of the young people's confinements. Bone fractures, dislocations and other injuries were also shown as common causes.

The survey was cited as showing that more than 52.5 per cent of the children had surgical treatment of some kind. (From the Blue Cross-Blue Shield RE-

A married woman is one who has given up the attention of several men for the inattention



Mr. and Mrs. James M. Phillips

## Cost Of Littering Staggers Imagination

Anti-litterbugs claim we will drop over 20 million cubic feet of trash on and along U.S. roads this year, enough to fill a freight train of more than 100,000 boxcars and stretching more than 1,000 miles. Taxpayers will pay over half a billion dollars to clean some of it up. However, a vast amount of it will remain to mar the scenic beauty.

## ... "We Cannot Afford To Be Arrogant . . ."

"We who are privileged to be working in science today and those of you who will soon be taking your place in the scientific community, have been, and will be, assuming an ever-widening role and responsibility in the affairs of the world. By being able to participate more fully in global scientific endeavors, we have been given the golden opportunity to take the international heritage of scientific knowledge and, through modern technology, apply it to the betterment of man's condition here on earth-perhaps even someday to the extension of man's domain as he reaches out into the universe. But we cannot afford to be arrogant over this new-found power of science nor slacken our pace in working toward new knowledge and new goals." . . . Dr. Glenn T. Seaborg, Evans Memorial Lecture, Ohio State University.



HEATHER LEA HICKS has the looks and personality to match her pretty name . . . if you don't believe it, just ask her granddad Bruce A. Hicks, Janitors Department. Heather is the daughter (born July 25) of Mr. and Mrs. Donald Hicks, Union Lake,



#### PHILLIPS - LOVEDAY

Dallas, Texas, will be the new home of Mr. and Mrs. James Morris Phillips. They were married Wednesday, February 16, at the Edgemoor Baptist Church. The Reverend John F. Burleson officiated at the rites.

The bride is the former Carolyn Annita Loveday, daughter of Mr. and Mrs. Howard Loveday, Clinton. Her father is in Y-12's Assembly Dispatching. The groom is the son of Mr. and Mrs. Morris Phillips, Clinton.

Given in marriage by her father, the bride wore a gown of peau de soie and taffeta with a veil of illusion. She carried a boquet of white carnations with a center of orchids.

Matron of honor, Mrs. Betty Wise, sister of the bride, wore a deep rose knit suit and carried a cluster of white carnations. Flower girl was Suzie Rush and Bobby Rush was ring - bearer. Both are from Powell.

Morris Phillips served as his son's best man. Ushers were Dewitt Burleson and Winston Swicegood, Clinton.

Assisting at the reception held at the church, were Mrs. B. S. Byrd, Peggy Sue Loveday, sister of the bride, Vivian Rush and Bertie Burleson.

The groom is employed by the Dallas Air Motive, Incorporated. The bride has been with the Home Credit Company, Oak Ridge, and is being transferred to the same office in Dallas.

# Y-12ers Are Active In Conservation

Several Y-12ers are active in the annual meetings of the Keep Tennessee Green Association and the Tennessee Conservation League coming up this weekend at the Holiday Inn, Oak Ridge. Evan Means, Research Services, is local arrangements chairman for the KTG meeting Thursday, March 17, which will celebrate 25 years of tree-farming in Amer-

Lou Doney, Development, and Means are local chairmen of the Conservation League meeting. Carl Frazier, Plant Shift Superintendents, is door prize chairman. F. S. Patton, Engineering Division, will head the delegation from the Sportsmen's Association and members of local affiliated clubs will serve as joint hosts.

Donald M. McSween, Commissioner of Conservation, will speak at a joint dinner for the KTG, TCL and the Game and Fish Commission Thursday night. The Game and Fish Commission will hold an open meeting following the dinner.

Commissioner McSween will represent Governor Frank Clement at the banquet of the Conservation League convention, when the Governor's Award for the Conservationist of the Year will be presented. This and nine other awards are co-sponsored by the National Wildlife Federation and the Sears-Roebuck Founda-

The series of meetings will include the Tennessee Tree Farm Committee and the Tennessee Forest Industries Committee, and a special breakfast for the purpose of forming a Tennessee Chapter of Trout Unlimited on Saturday. The TCL convention ends with a Saturday luncheon session.



# Shifters Plan Big Spring Crappie Contest March 26 At Blue Springs

Monday marks the first day of caught . . . and a big dock award shifters are ready to get started ployee, however. fishing. Their big Crappie Carnival will be staged Saturday, and children are welcome at the March 26, at Blue Springs Boat big event . . . the first fishing Dock, Watts Bar Lake.

closing-out time is 5 p.m. There bites this early. And they should will be 10 big prizes for crappie be running by Saturday week!

Spring . . . and E, F, G, H and J also. One fish award per em-

All Y-12 employees, spouses and children are welcome at the rodeo of the year. It's all crappie Angling begins at 6 a.m. and now . . . for that's about all that

## Save Yourself First Says Cancer Society

The American Cancer Society says, "The first thing to save for your old age is you." Promoting the once-a-year check-up, the Society also lists the seven danger signals to watch for:

- 1. Unusual bleeding or discharge.
- 2. A lump or thickening in the breast or elsewhere.
- 3. A sore that does not heal. 4. Change in bowel or bladder
- 5. Hoarseness or cough.
- 6. Indigestion or difficulty in swallowing.
- 7. Change in a wart or mole. If any of the above danger signals lasts more than two weeks, check with a physician. Early detection is one of cancer's

## Knock Dependents Off, The List, That Is!

deadliest enemies.

It's that time of year again . . when we wish we had not claimed so many dependents, as far as payroll deduction is concerned. The answer is you may need to reduce the number you are now claiming. The Timekeeping Department, or your division office. has the necessary forms to correct your dependency deficiency. There is nothing illegal about claiming less dependents than you actually have . . . even going drums . . . it doesn't corrode, and below zero!



ville, via Clinton Highway, to North Portal, straight day J. R. Johns, plant phone 3-5005, home phone Knoxville 689-5639.

Ride wanted or will join car pool from Hillcrest Lane, Kingston, to West Portal, straight day. G. E. Byrd, plant phone 3-5030, home phone Kingston 376-6885.

# **Dancetimers Celebrate** Saint Patrick's Day

The Dancetimers are celebrating St. Patrick's Day with a special party, tomorrow, Thursday, March 17. The party gets underway at 9 p.m. at the Ridge Recreation Hall.

All single adults are invited to "put on the green" and come to the party.

#### CHEMISTRY AFLOAT

Local lake lovers have discovered chemistry again in their recreation. Foam plastics are now being used extensively as flotation materials on rafts, houseboats and dockings. The plastic is much more versatile than



THE FLOWERING JUDAS TREE outside the window hasn't put on its Spring dress yet . . . but any day now, any day. (Tennessee folks call the Judas tree a redbud.) The beautiful tree reminds us that Y-12's big Spring dance is set for Friday, April 15, at the Oak Terrace, Oak Ridge.

# 3-Way Tie Ends Basketball Race

The final week of regular basketball had its usual spills and thrills last week. The Fungi and Isotopes opened the final phase of the second half by colliding last Monday. The Fungi won 31 to 27 in a very rough game. It was a low scoring bout, with the scoring fairly evenly distributed. Walter Porter and Paul Hatmaker led the scorers for the winning team and Terry Mothershed starred for the losers.

Y-12's Collegians won game number two at the expense of the Nats, 53 to 45. Finally the young Y-12 team reached its potential against a much taller team. Bill Martin led the team with 23 points, driving and hitting well throughout the game. Jim Froula fired 10 and Stan Pawley had eight. For the losers it was Homer Tucker, 15, and Nelson Edwards,

Game number three was the thriller of the week . . . as the Fearless Five downed Y-12's Has Beens in overtime . . . 68 to 62. Locked up with a 56-56 score, the ball game was exciting all the way. Both teams fought savagely to win . . . with the Has Beens missing three opportunities to win in the closing seconds of the game. Bill Kirksey was hot for the losers and Larry Finch for the winners. Thus, the Fearless Five, Has Beens, and Bombers are locked in a three-way tie for first position for the last half of league action. A play-off will decide this winner. If the Fearless Five do not win, another play-off will determine league championship. Meanwhile, Recreation announces a single elimination tournament to wind up the post season action.

Wednesday's action saw a make-up game between the Fearless Five and the Collegians . the FF team taking it easily 62 to 30. Jim Froula led the losing Y-12 squad with 10 points . . . Goetsch and Ray Cooper Cloy both fired 15 for the winning team

Final standings follow:

Team	v
Has Beens, Y-12	7
Bombers, ORNL	7
Fearless Five, ORNL	7
Metals & Ceramics, ORNL	5
Collegians, Y-12	3
Fungi, ORNL	3
Nats, ORNL	2
Isotopes, ORNL	1
Losers, Y-12	0



TRUSTWORTHY angler H. N. Benninghoff enters the first fish in the 1966 Annual Rodeo . . this nice crappie he pulled out of Watts Bar near Blue Springs. Witness Jim McLain signed the affidavit three months before the fish was caught. We're waiting around for McLain to enter one that Bennie witnessed now!

# **New Fishing Race** Began Saturday

Y-12 Isaac Waltons are reminded that the Spring and Summer Fishing Rodeo began last Saturday, March 12. That is, if you caught a big one after 12:01 a.m. Saturday, you can enter it in the Fishing Rodeo. (A catch can be entered in this rodeo as well as the annual . . . the only difference being that the Annual requires a

Eligible species include smallmouth, largemouth and striped bass, walleyed pike, sauger, crappie, trout, bream or bluegill. All species must be caught in Tennessee waters.

The contest will extend from now until September 11.

Prizes will be given in each species class for first, second and third place winners.

The specie, weight, length and girth must be verified by a dock operator or other reliable source.

The Recreation Department has plenty of the seasonal entry forms . . . so if you haven't picked any up, just give them a ring . . . extension 3-7109. They'll be and Seasonal entry blanks.

# Recreation



Saturday, March 19 HIGH - POWERED RIFLE LEAGUE: 8:45 a.m. Oak Ridge

Sportsman's Association.

Monday, March 21

FIRST DAY OF SPRING: Hal-

BOWLING: C League, 5:45

Ark Lanes. TABLE TENNIS: 7 p.m., Wild Cats Den, Oak Ridge.

Tuesday, March 22 PHYSICAL FITNESS: 7:30 p.m., Oak Ridge High School Gymnasium.

Wednesday, March 23 IN-DOOR RIFLE LEAGUE: 7 p.m., Anderson County Gun Club,

BOWLING: Mixed League, 8 p.m., Ark Lanes.

Thursday, March 24
BOWLING: Classic League,
5:45 p.m., Ark Lanes.

Saturday, March 26 CRAPPIE RODEO: E. F. G. H and J Shifts. All Y-12ers welcome. Blue Springs Dock, Watts Bar Lake.

## Road Toll For 1965 Reached All-Time High

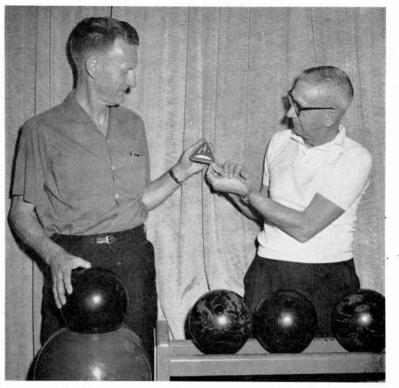
Traffic accidents last year killed 47,800 persons, an all-time high, according to the National Safety Council. The accidents resulted in an economic loss to the nation of about \$8.2 billion.

The death toll was a 10 per cent increase from the previous record of 43,564 persons killed in 1963. In addition, an estimated 1.7 million persons suffered injuries last year that disabled them beyond the day of the ac-

The economic loss from accidents includes wage loss, medical expenses, overhead cost of insurance, and property damage, the Council points out.

In the last three years the annual traffic death toll increased as much as it did in the 16 years between the end of World War Top Teams Fall II and 1961.

Nothing is more disgusting to that college student than shaking an envelope from dad - and happy to send you both Annual finding nothing in it but news



A 264 SCRATCH GAME, rolled February 10, brought George Mitchel, left, an ABC 'Century' patch for rolling more than a hundred pins over his regular bowling average. Roy Roberts, secretary-treasurer of the Classic League, makes the presentation.

# Bumpers Wax Hot In Classic Bowling After Taking March 5, 6 Tournament

The Bumpers, not content with | man, Markers, posted a 255 taking scratch team honors in handicap single. Troutman's 638 the Bowling Tournament, now scratch series, 707 handicap series, hold a three-point lead in the were high also. Classic race. They downed the Eightballs last week for three points. Taking four were the gles and 2701 in series. The Play-Markers, moving up, over the boys rolled a 1060 handicap in Wasps. The only other sweep of singles, and the Markers marked the night went to the Swingsters past the Splinters. Taking three were the Tigers over the Rippers, the Has Beens over the Playboys and the Rebels over the Smelters. The Wolves and Cubs shared two points, as did the Screwballs and All Stars.

J. W. Halsey, Bumpers, rolled a 236 scratch game for high game of the week. Don Trout-

# In Mixed League

Top-ranked teams fell again in the Mixed League last week as bowlers hit the alleys with a fury. The Twisters tamed the Goofers for four . . . and the Mustangs clipped the Better Halves for four. Taking four also was the Blue Angels over the Chumps. The Alley Cats scratched out three from the Subs.

Edith Duckworth, subbing for the Better Halves, rolled a high single of 191. Incidentally, Edith took a patch for an all-spare game in the Y-12 Tournament just past. Nancy Garrison, Blue Angels, posted a 220 single handicap game. Ernestine Teeter, Chumps, had a 454 high series in scratch . . . and Donna Ferguson, Twisters, capped a 605 handicap

In male bowling it was W. C. Smith, Alley Cats, with singles of 209 scratch, 236 handicap. George Cantrell, Mustangs, mustered a 571 scratch series . . . and C. C. Roberts, Blue Angels, rolled a 644 handicap series.

The Mustangs took all team honors, singles of 679 scratch, 820 handicap . . . and series of 1962 scratch, 2385 handicap (which was an all-season high).

League standings follow: Better Halves 25 24½ Alley Cats Goofers ..... 231/2 Mustangs
Twisters
Blue Angels
Subs
Chumps

The Bumpers pushed scratch rolling, too, marking 966 in sina 2973 handicap series.

League standings follow:

Team	W	L
Bumpers	31	9
Markers	28	12
Eightballs	23	17
All Stars	23	17
rigers	23	17
Swingsters	23	17
Playboys	22	18
Has Beens	22	18
Rebels	22	18
Wolves	21	19
Rippers	18	22
Cubs	1536	241
Splinters	13	27
Smelters	1216	27
Screwballs	12	28
Wasps	11	29
아이들은 가득시를 하는 것이 없었다. 사람들은 아이들이 아니라 아이들이 아니다.		

# Wyatt And Norris Lead Table Tennis

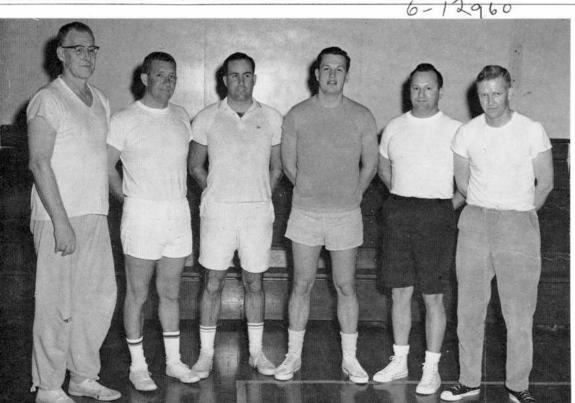
Y-12ers Loyd Wyatt and A. J. Norris lead both Table Tennis Leagues . . . as Wyatt won four from Roy Huddleston in action last week. Also in the X League, W. D. Jones won five from Bill Maddux and W. B. Motley took four from K. Bunzl. Huddleston

defeated Motley for four. X League Standings: Player F Wyatt E. Wyatt
L. Huddleston
B. Motley
D. Jones
Mook
Bullock
Bullock Bunzl W. A. Maddux ... F. W. Shull Jr. E. O'Rourke ....

In Y action, G. Moretto won three from Joe Lewin . . Gambill took three from V. R. R. Uppuluri . . . also three from Moretto. G. Brewer took the only sweep of the league by winning five from A. J. Weinberger.

Y League Standings:		
Player	W	L
A. J. Norris	30	5
G. W. Brewer	28	7
V. Uppuluri	25	10
E. F. Gambill	31	14
F. Kertesz	15	20
A. J. Weinberger	13	22
J. Lewin	12	23
G. F. Moretto	11	24
C. R. King	0	20
P Dilloton	0	20

15 1/2 16 1/2 20 1/2 20 1/2 22 1/2 22 1/2 27 1/2 21/2 27 1/2 21/2 27 1/2 21/2 27 1/2 21/2 27 1/2 Life's biggest bore is a man that can take two hours telling you about a half-hour television



Y-12'S BIG BEAVERS won the Volleyball League hands down. Here they are six-strong the final night of action. From left are Jay Ledgerwood, C. R. McGinnis, Rick Hull, Bob Culton, George Duncan and Captain Loyd Wyatt.



#### UNION CARBIDE CORPORATION **NUCLEAR DIVISION**

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Oak Ridge, Tenn. Permit No. 71

# Evening College Sets Registration March 23 Reducer at a heart

# College Level Studies

Next Wednesday and Thursday, March 23, 24, has been set aside for registration at the University of Tennessee's Evening School. Classes begin on Monday, March

All UT Evening classes in the Oak Ridge division are held at the Oak Ridge High School. Registration is there also.

Courses offered this upcoming quarter include:

Accounting 2130—Introduction Algebra Refresher

Economics 2130 — Principles Education 3020 — Principles and Organization of Education

Educational Psychology 3810 -Adolescence

Engineering 1130 - Basic Energy Relationships

English 1130 — Composition English 2111 — English Literature

History 2230 - History of the United States

Mathematics 1130 - General Mathematics 1330 - Calculus

and Analytic Geometry Mathematics 2130 - Structure

of Number System

Mathematics 2320 — Calculus and Analytical Geometry Office Administration 2310 -

First Course in Beginning Shorthand Series.

Psychology 2110 — General Psychology 2120 — General Psychology 3450 — Industrial and Personnel

Rapid Reading Sociology 2130 — General

Speech 2310 — Basic Public Speaking

Speech 2320 - Basic Public Speaking

Speech 2330 - Basic Public Speaking

Additional information on the Spring curriculum may be obtained by contacting the Evening College's Oak Ridge office, telephone number 482-2851.



CURBCREEPER JUST CAN'T WAIT FOR THE LIGHT TO TURN GREEN ... IS OFTEN

SQUASHED BY AUTOS, MAKING THE ASPHALT UNTIDY ...

NATIONAL SAFETY COUNCIL

The Badgers got a boost toward Spring Quarter Offers the last half championship last week in the C Bowling League. They took the Sunflowers for the full four-point. With only four more nights on the alleys, they lead the Rounders by seven points. (The Big Five who took the first half of the league are tied for the cellar position.) The Rodders took the Parbusters for the only other sweep of the night. Taking three it was the Invalids over the Shud-A-Beens and the Rollmasters past the HiLifers. Splitting two were the Rounders-Big Five, and the Strikers and Fireballs.

Bill Sise, Big Five, and J. E. Morgan, Rounders, tied for high scratch game of the week, each with 213. Jack Lovegrove, Shud-A-Beens, rolled a 240 single handicap. His series of 593 scratch, 683 handicap were high also.

The Big Five took singles in scratch counting with 882. The Invalids rolled high handicap counts of 1021 in singles, 2936 in series. The Rounders rounded out scratch series highs of 2593. League standings follow

League standings follow.
Team W
Badgers
Rounders 26
Sunflowers 25
Parbusters 22
Invalids 22
HiLifers21
Strikers 21
Rollmasters 21
Rodders 21
Fireballs 20
Shud-A-Beens 16
Big Five 16

### **Pedestrians Have** Right-Of-Way!!!

Give pedestrians the same consideration that you would expect if you were walking. Allow those caught in the middle of the street to reach the far curb when the light changes. If you turn right or left at the light be careful and wait until the pedestrians crossing on the green signal are clear of your path. Always remember that pedestrians have the rightof-way at intersections where there is no traffic signal or offi-

## 'Others' Is Good Aim Of Salvation Army

General William Booth, founder of the Salvation Army, was once working on a cablegram to send members of the Army all over the world at Christmas time. The longer he worked on the message, the longer it got. After strug-gling to encompass the compas-sion, aims and ideals of the members of the Salvation Army in a short phrase, he finally chose one The word he cabled was: "Others."

#### SUPPORTING A FAMILY

The father asked his prospective son-in-law if he could support a family. "No sir, I was only planning to support your daughter. The rest of you will have to fend for yourselves."



Mid-March finds more 12ers crossing important milestones with Union Carbide Corporation. Congratulations.

20 YEARS Lacey D. Keele, Production Analysis, March 18.

15 YEARS

James E. Borum, Process Maintenance, March 16.

Hillis Ross, Area Five Maintenance, March 16.

Isadore Sharper, Janitors Department, March 16.

Charles T. Haun, Buildings, Grounds and Maintenance Shops, March 18.

Clayton W. Cook, H-1 Foundry, March 19.

James Horace Nash, G-3 Processing, March 19.

Joe Briggs, Beta Two Forming, March 19.

Douglas R. Carter, Specifications and Systems, March 19.

Samuel Eunice, Janitors Department, March 20.

Roy F. Young, Chemical Serv-

ices, March 21.

10 YEARS Charles W. Gallaher, Dispatching Department, March 17.

# New Business

Continued from Page 1

hold and industrial cleaners; and latexes to make better house paints.

It is noted that Union Carbide also supplies a key ingredient for a resin that has made possible the new permanent-press fabrics, and that another product has recently been discovered for giving the same durable-press qualities to white-shirt materials. Also, recently developed chemical products are being tested to give concrete greater tensile strength, to prevent road surfaces from chipping, and to control the new cement sets.

#### Annual Report Highlights Record Year In Sales And Earnings

As previously reported, Union Carbide's sales for the year passed the \$2 billion mark in 1965 for the first time in the corporation's history. They were 10 per cent above 1964 sales. Earnings of \$3.76 a share surpassed the previous year's record by approximately 20 per cent.

demand for products and to maintain efficiency, the corporation plans to invest more than \$300 million for new construction in 1966 domestically, and overseas somewhat more than the \$49 million spent last year.

Total assets increased from \$2,054,033,000 to \$2,282,828,000 in days and Wednesdays. Attend-1965, and the stockholders' equity rose from \$1,243,233,000 to \$1,357,-

Summing up a year of outstand progress, Mason said, "Although with increased global operations, we are contending more and more with the complexities of world political, economic and social forces, we are extremely optimistic about the long-range prospects for growth in both the sales and earnings of the corporation."

#### FIRE FACTS

Every day fire levies its tragic toll of death and destruction: 32 lives, 1,520 homes . . . 14 schools . . eight churches . . . five hospitals and nursing homes . . . 120 stores . . . 135 industrial plants. Only you can improve the record. Prevent fires . . . it's your job,



CARBIDE CAMERA CLUB officers are busy on another busy year. From left, are Seymour J. Rafferty, vice president; Jeri Kobisk, secretary-treasurer; and Don E. Hendrix, president. Membership in the Camera Club is open to all Carbiders and members of their

# Active Camera Club Membership Plans Dark Room Technique Class

The Carbide Camera Club | Kobisk, Building 9704-2, Y-12. rounds out the first quarter of Schedules and guide text will be 1966 with membership pushing mailed shortly. the 100 mark. Plans are well underway for the Dark Room Technique and Procedure classes, and the CC annual Salon, to be held in June during the Oak Ridge Arts Festival.

The club happily resumed meeting in their own headquarters at Cheyenne Hall March 8, with approximately 80 members and guests literally bulging the walls. Latercomers found "standing room only" as the evening's program got underway . . . but they also found it well worth it. Ralph Rogers' 16mm cinematography of "Sailing in the Leeward Islands" proved to be an hour filled with exotic scenes of beautiful color and realism . . . making one feel as though you were there (and at times, as the horizon rose and fell with the pitch of the sloop, like reaching for the Drama-mine). Bob Freestone, acting critique for the judging of the month's competition of "Still Life and Abstracts," further livened the program with his whimsical To keep pace with the strong repartee of valuable criticism and evaluations.

The Dark Room class sessions . after unforeseen conflictions causing deferment . . . are now definitely slated to begin next Wednesday, March 23, at Cheyenne Hall, at 7:30 p.m. Future meetings will alternate on Thursance of the classes will be limited to members in good - standing. Those interested in participating

Monthly competition for April will be "Open" on any photo-graphic subject. Deadlines for entries is March 29. The program for the April 12 meeting is to be announced.

## International Company Sets India Expansion

Union Carbide International Company announces plans for a \$17.5 million expansion of polyethylene plant in India. In addition, the International Company will double India's polyethylene capacity in India and will provide facilities for the production of other organic chemicals, including ethylene, propylene, acetylene, and butanol.

## Man Works Less For More Today Than 10 Years Ago

How big is inflation? Today's worker puts in only 17 minutes to purchase a pound of meat. Ten years ago it took 25 minutes of his labor to purchase the same amount. True, the price of meat has gone up . . . the man's wages have increased. But today's farmer is producing enough food for himself and 26 other people . . . a standard other nations could look to when criticizing America's economy.

#### HOME FIRES

Most home fires are caused by careless smoking, according to the National Fire Protection Associashould contact Dave Bourgette; tion. So, if you're going to smoke and dues should be sent to Jeri at home, watch it!



"You'll find the Wennerstrom contract on the second fairway and the production report somewhere in the rough near the fourth